Message

From: Laija, Emerald [Laija.Emerald@epa.gov]
Sent: 7/12/2017 1:09:14 PM
To: d'Almeida, Carolyn K. [dAlmeida.Carolyn@epa.gov]
CC: Henning, Loren [Henning.Loren@epa.gov]; Herrera, Angeles [Herrera.Angeles@epa.gov]
Subject: RE: Question on Williams Groundwater Migration EI Status

Thank you so much for this write up. The letter will simply list that this this site (among other AF sites) has a EI status of GMNC and that we are asking AF to work with the Region to address this issue. I will confirm with them by email that EPA cannot change this indicator status until groundwater migration is fully understood and under control. Based on their write up below, it looks like that are planning to work with you.

Thanks,
Emy

Emerald Laija, Environmental Scientist
(202) 564-2724 | laija.emerald@epa.gov

From: d'Almeida, Carolyn K.
Sent: Tuesday, July 11, 2017 1:25 PM
To: Laija, Emerald <Laija.Emerald@epa.gov>
Cc: Henning, Loren <Henning.Loren@epa.gov>; Herrera, Angeles <Herrera.Angeles@epa.gov>
Subject: RE: Question on Williams Groundwater Migration EI Status

Hi Laija

The rationale for groundwater not under control listed below is old and I agree that the explanation does not reflect all of the effort AF has put into the site. That said, the water table is still rising. We recently learned that the City of Mesa now has five public supply wells within 5 miles downgradient of former Williams AFB that have apparently shifted the groundwater flow direction at the site. The AF has prepared a sampling plan to sample for PFAS which has not yet been implemented and there are several potential source areas and documented discharges of PFAS. I do not want to change this indicator now and then find out we have a PFAS groundwater problem a few months from now. Also, at the ST12 fuel spill site we are in informal dispute due to the fact that the thermal remedy was terminated early by the PBR contractor before cleanup objectives stated in the workplan were met. The 20 million dollar Steam Enhanced Extraction (SEE) system was still removing thousands of pounds of hydrocarbons daily when it was shut down and dismantled over our objections. AF wants now to proceed with Enhanced Bioremediation (EBR), however given the estimates of remaining LNAPL our independent modeling analysis indicates that it will take 100 -200 years for EBR to meet the RAOs specified in the 2013 RODA, which specified a 20 year remedial timeframe. We have expressed concern that the 3 acre site has been heated to boiling temperatures and will remain hot for decades; increasing the solubility and potential for off site migration of contaminants. AF responded by constructing a "containment system" which they do not plan to use for hydraulic containment but rather for distribution of a sulfate amendment for Enhanced Bioremediation (EBR). I believe a major reason to not wanting to hydraulically contain the plume is that groundwater extraction will rapidly redistribute heat across the area and potentially kill off bacteria populations they are depending upon for EBR to work. However there are also no plans for hydraulic containment of the sulfate amendment they will be injecting which also has the potential to significantly degrade the City of Mesa's water supply down gradient. The current proposal is not well thought out; The AF's PBR contractor may not even be aware that the City has supply wells downgradient as that area was bare open desert when they bid on this project. We are not inclined to change the Environnmental Indicator as long as we are in informal dispute.

Let me know if you need help writing this letter.

Carolyn d'Almeida
Remedial Project Manager
Federal Facilities Branch (SFD 8-1)
US EPA Region 9
(415) 972-3150

"Because a waste is a terrible thing to mind..."

From: Laija, Emerald
Sent: Tuesday, July 11, 2017 9:15 AM
To: d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>
Subject: Question on Williams Groundwater Migration EI Status

Hi Carolyn,

I'm working with our sister federal agencies on getting an Environmental Indicator Letter for sites where human exposures or groundwater migration are not under control. The Air Force provided some input on Williams AFB below in black. The red text is what I found on our EI forms. Can you let me know if the AF is accurate in their understanding? Is there a plan to change their GMID status to under control? We'd like to get this letter out in the next few days. Would you be able to get back to me in a day or two?

WILLIAMS AIR FORCE BASE / AZ7570028582 / GMID / Documented Groundwater Migration

- AF does not concur with EPA's finding of "Documented Groundwater Migration" at the former Williams AFB.
- To address U.S. EPA/ADEQ concerns about potential migration, the AF has conducted extensive site characterization and monitoring, and continue to demonstrate/report no indication of contaminant migration. The 2016 Five Year Review (FYR), reviewed by U.S. EPA/ADEQ, did not identify groundwater migration at any of Williams' sites. The 2016 FYR did identify uncertainty regarding the mass of remaining light non-aqueous phase liquid (LNAPL) and dissolved phase benzene as an issue for ST012, but not its location or migration.
- AF will engage with the EPA remedial program manager on this EI to resolve the disconnect.

Williams AFB is listed as GMNC (Documented Groundwater Migration). The latest write-up for this justification states:
1). Remedy failure at LF-04 landfill, TCE & PCE recently identified in groundwater. No further action is no longer appropriate, source & extent of contamination has been further characterized however the FS will not be completed until 2010 with a ROD thereafter and remedial action achieving control not likely in place and operational until 2011. 2) ST-12 plume currently stable but stability threatened by rising water table.

GW Justification Last Updated 7/14/2009
GW Determination Last Reviewed 11/28/2016

Thanks,
Emy

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